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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,248	07/06/2001	Duane Joseph Buening	DP-302682	5981

7590 06/18/2002  
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EXAMINER

LE, DANG D

ART UNIT PAPER NUMBER

2834

DATE MAILED: 06/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/900,248

Applicant(s)

BUENING ET AL.

Examiner

Dang D Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 5 and 9 are objected to because of the following informalities:
  - Claim 5, line 2, and claim 9, line 8, replace "edge" with – side --. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 3, 4, 6, 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. The term "about" in claims 3, 4, 6, 7 and 9 is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. It is not clear if three slot pitches or any other number of slot pitches are also claimed.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lefrancois et al.

Regarding claim 1, Lefrancois et al. show an alternating current (AC) generator (Figure 1) including an armature core (10) having a plurality of teeth separated by intervening slots with a slot pitch, at least one multiphase winding disposed on said armature core, and a rotor (Figure 2) disposed in said armature having a plurality of pairs of rotor poles (52), each pair respectively configured for energization in opposite magnetic polarity, said poles (52) comprising a trapezoidal shape having a base (62), a leading side (left side in Figure 2), a trailing side (right side), and a tip side (60), said leading side having a plurality of portions (58, 59).

7. Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kometani et al.

Regarding claim 1, Kometani et al. show an alternating current (AC) generator including an armature core (4) having a plurality of teeth separated by intervening slots with a slot pitch, at least one multiphase winding disposed on said armature core, and a rotor (Figure 10) disposed in said armature having a plurality of pairs of rotor poles (8, 9), each pair respectively configured for energization in opposite magnetic polarity, said poles (8, 9) comprising a trapezoidal shape having a base, a leading side (right side in

Figure 10), a trailing side (left side), and a tip side (27), said leading side having a plurality of portions (27c, 27a).

Regarding claim 2, it is noted that Kometani et al. also show said leading side having a first portion (27c) extending from said tip sloping at a first rate, said leading side having a second portion (27a) extending from said first portion sloping at a second rate less than said first rate.

Regarding claim 3, it is noted that Kometani et al. also show the first portion sloping between about one and two slot pitches and said second portion sloping between about one-half and one and one-half slot pitches.

Regarding claim 4, it is noted that Kometani et al. also show said first portion sloping about one slot pitch, said second portion sloping about three-quarters slot pitch.

Regarding claim 5, it is noted that Kometani et al. also show said tip side (27) being offset relative to said base, wherein said leading edge having a first portion extending from said tip sloping at a first rate, said leading side having a second portion extending from said first portion sloping at a second rate less than said first rate.

Regarding claim 6, it is noted that Kometani et al. also show said first portion sloping between about one and two slot pitches and said second portion sloping between about one-half and one and one-half slot pitches.

Regarding claim 7, it is noted that Kometani et al. also show said first portion sloping about one slot pitch, said second portion slopes about three-quarters slot pitch.

Regarding claim 8, it is noted that Kometani et al. also show said offset being in a direction of rotation of said rotor.

Regarding claim 9, it is noted that Kometani et al. also show an alternating current (AC) generator including an armature core having a plurality of teeth separated by intervening slots with a slot pitch, at least one multiphase winding disposed on said armature core, and a rotor disposed in said armature having a plurality of pairs of rotor poles, each pair respectively configured for energization in opposite magnetic polarity, said poles comprising a trapezoidal shape having a base, a leading side, a trailing side, and a tip side, said leading side having a plurality of portions, wherein said tip side is offset relative to said base, wherein said leading edge has a first portion extending from said tip sloping at a first rate, said leading side having a second portion extending from said first portion sloping at a second rate less than said first rate, said first portion slopes between about one and two slot pitches and said second portion slopes between about one-half and one and one-half slot pitches, wherein said trapezoidal shape further includes a pair of shank portions (between 27a and 8) extending from said base.

***Information on How to Contact USPTO***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7382 for regular communications and (703) 308-7382 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

DDL  
June 15, 2002

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Long Lh